# Multi-Species Conservation Strategy

Responses to Comments

# MULTI-SPECIES CONSERVATION STRATEGY RESPONSES TO COMMENTS

# Multi-Species Conservation Strategy Overview of Responses to Comments

Many comments reveal confusion about the purpose of the Multi-Species Conservation Strategy (MSCS) and its relationship to the Programmatic Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Other comments question how conservation measures identified in the MSCS would be implemented. The following text provides a general clarification of these points but is not intended as a specific response to an individual comment.

### Multi-Species Conservation Strategy

The MSCS for the CALFED Bay-Delta Program (CALFED Program) is an approach to fulfilling the requirements of the federal and state Endangered Species Acts (ESAs) and the Natural Community Conservation Planning Act (NCCPA) that may be triggered by entities implementing CALFED Program actions. The MSCS provides a two-tiered approach to compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The MSCS provides a program-level evaluation of the CALFED Program under the federal ESA and the NCCPA. As the Programmatic EIS/EIR provides a program-level evaluation review under NEPA and CEQA, so the MSCS provides for the preparation of action-specific implementation plans (ASIPs) for a second-tier, action-specific, level of review under the federal ESA and the NCCPA. In this second-tier environmental review under NEPA, CEQA, the federal ESA and the NCCPA, the impacts of specific actions will be assessed. In addition, appropriate mitigation measures will be defined and implemented. The MSCS two-tiered compliance strategy will strengthen and simplify compliance with the state and federal ESA and the NCCPA for CALFED Program actions, by ensuring that both the aggregate impacts of the CALFED Program and the specific impacts of the individual CALFED actions are addressed consistently and adequately.

Because it is a comprehensive regulatory compliance strategy and is integrated with the Programmatic EIS/EIR, the MSCS helps to assure that CALFED Program actions can be completed in accordance with the state and federal ESAs and the NCCPA—and that the compliance process will be systematic, efficient, and predictable. The MSCS will not provide the CALFED Program with general authority to take endangered or threatened species. However, the MSCS compliance process provides the means by which CALFED implementing entities may obtain authorizations under the federal ESA and the NCCPA to allow incidental take of endangered or threatened covered species that may be caused by specific CALFED Program actions or groups of actions.

#### Relationship with Programmatic EIS/EIR

The MSCS does not supplant or compete with the Programmatic EIS/EIR. Information and analyses contained in the Programmatic EIS/EIR are used in the MSCS to prepare analyses and reach conclusions about the CALFED Program's potential effects on 244 evaluated species and 18 Natural Community Conservation Plan communities (NCCP communities) for the state and federal ESAs and NCCPA purposes. The MSCS conclusions regarding CALFED Program effects are consistent with the conclusions in the Programmatic EIS/EIR. However, the MSCS analyses and conclusions are presented in a manner intended to assist the U.S. Fish and Wildlife Service

National Marine Fisheries Service (NMFS), and California Department of Fish and Game (DFG) in making necessary regulatory determinations under the federal ESA and the NCCPA.

The MSCS impact analysis is more focused than the impact analysis in the Programmatic EIS/EIR. Only proposed CALFED Program actions that may affect NCCP communities and evaluated species are evaluated in the MSCS. CALFED Program actions were reviewed to determine which of the proposed actions may affect NCCP communities and evaluated species. Actions without the potential to affect NCCP communities and evaluated species are not included. Similarly, projects or activities that are not part of the CALFED Program are not included in the MSCS impact analysis. For example, the impacts of thermal pollution from irrigation return flows are not assessed in the MSCS because the cultivation of farmland in the Delta is not a CALFED Program action.

#### Conservation Measures

The MSCS contains two types of conservation measures to achieve the NCCP community and evaluated species prescriptions:

- Measures to avoid, minimize, and compensate for CALFED's adverse effects on NCCP communities and evaluated species.
- Measures to enhance NCCP communities and evaluated species that are not directly linked to CALFED's adverse effects.

The first type of conservation measure is designed to offset the adverse effects of CALFED Program actions and will be undertaken by entities implementing CALFED actions. The second type of conservation measure generally represents refinements to portions of the Ecosystem Restoration Program; Water Quality Program; Levee System Integrity Program; and Comprehensive Monitoring, Assessment, and Research Program (CMARP) elements of CALFED that will benefit NCCP communities and evaluated species. These enhancement measures will be undertaken by many different entities, including CALFED agencies. Progress on implementing CALFED actions that adversely affect NCCP communities and evaluated species (for example, facilities construction) may be linked to progress on implementing conservation measures to enhance the condition of these species and habitats (for example, habitat restoration).

The MSCS includes tables that identify avoidance, minimization, and compensation measures for each evaluated species. These tables identify the types of measures that may be necessary to offset the adverse effects of CALFED actions. The precise conservation measures that will apply to avoid, minimize, and compensate for a specific action's adverse effects will depend on the location and timing of the action—as well as the current status, distribution, and needs of the affected species and habitats. To the extent practicable, the priority for implementing these types of conservation measures is first to implement conservation measures to avoid adverse effects, then to implement measures to minimize adverse effects, and then to implement measures to compensate for adverse effects. The appropriate conservation measures will be developed and incorporated into an ASIP for specific CALFED actions.

Ecosystem Restoration Program actions to restore or enhance habitats that are implemented concurrently and in proximity to one another will be considered together when assessing their impacts on species and habitats and imposing compensatory measures. If the restoration and enhancement actions culminate in an increase or improvement in a particular NCCP community, compensatory measures may not be required even if a temporary or limited adverse modification of the community or habitat type would result from the actions. Ultimately, the

need for compensatory conservation measures for CALFED restoration and enhancement actions will depend on the type, location, timing, and success of the related actions.

The MSCS conservation measures do not comprise all actions that will be credited toward, or required for, compliance with the state and federal ESAs and the NCCPA. USFWS, NMFS, and DFG will consider all proposed CALFED actions that would benefit or harm the NCCP communities and evaluated species in the MSCS to determine whether CALFED complies with the state and federal ESAs and the NCCPA. CALFED actions, including Ecosystem Restoration Program actions, that are not emphasized or refined in the MSCS may nonetheless be important for compliance with the state and federal ESAs and the NCCPA.

# 0. General Responses

MS 1.0-1

The CALFED Program mission is to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system. This mission is supported by several solution principles, one of which is to pose no significant redirected impacts. Therefore, if in the course of meeting an objective through groundwater pumping an impact on valley oak habitat resulted, that action would be reevaluated to avoid or compensate for that impact.

Chapter 6.2 in the Programmatic EIS/EIR describes the impacts of the Water Transfer Program, the Water Use Efficiency Program, and the Conveyance element on terrestrial species and habitats. Section 6.2.11 includes mitigation strategies that will reduce any potential impacts to valley oaks to a less-than-significant level. The MSCS provides additional analysis of the Program's impacts on valley/foothill woodland and forest, and offers measures in more detail than in the Programmatic EIS/EIR that will offset impacts for purposes of compliance with the endangered species laws. (See Attachment 4, Table O in the June 1999 MSCS.)

MS 1.0-2

The MSCS provides the necessary information for 18 habitat types, referred to as the NCCP habitats and defined in Chapter 2 in the MSCS. The 18 NCCP habitats are broad habitat categories, each of which includes a number of habitat or vegetation types recognized in frequently used classification systems. The habitat types were also selected so that comparisons could be made with Ecosystem Restoration Program habitat targets. For most of the 18 NCCP habitats, the Ecosystem Restoration Program targets constitute the MSCS habitat conservation goals, and the Ecosystem Restoration Program actions necessary to meet the targets are embodied in the conservation measures necessary to meet the MSCS habitat goals. In this manner, the Ecosystem Restoration Program and the MSCS are fully integrated.

MS 1.0-4

The MSCS evaluates the impact to, and recommends conservation measures for, 244 species—not only fish. The conservation measures ensure that the CALFED Program provides improvement to all of the evaluated species that might be negatively affected by construction or other actions. Most of the conservation measures will require some enhancement or restoration of the species' habitat or avoidance of disturbance. Relocating species is a last resort as relocation tends to be more detrimental to the species than improving existing conditions.

MS 1.0-5

As explained throughout the responses to comments on the MSCS, the MSCS is legally adequate to serve as a biological assessment for the federal ESA and as a programmatic plan under the NCCPA. The MSCS will be

revised to reflect these comments and responses, and will be circulated to the public as part of the Final Programmatic EIS/EIR as required under NEPA.

MS 1.0-6

The MSCS has been revised to clarify that these two efforts are integrated through integration of the MSCS and the Ecosystem Restoration Program. The MSCS contains two types of conservation measures: (1) measures to avoid, minimize, and compensate for adverse effects on NCCP communities and evaluated species caused by individual CALFED Program actions; and (2) measures not linked to the direct adverse effects of individual CALFED Program actions, which are intended to ensure that the CALFED Program achieves the overall species conservation goals. The avoidance, minimization, and compensation measures are intended to counteract the adverse environmental effects of CALFED Program actions and will be funded and implemented primarily, if not exclusively, by the entity implementing the action or group of actions. The MSCS generally prescribes measures that apply to CALFED Program actions. However, the precise measures necessary to avoid, minimize, and compensate for the adverse effects of individual CALFED Program actions or groups of actions will depend on the scope, location, and timing of the action(s)—as well as on the current status, distribution, and needs of the affected species and habitats.

MS 1.0-7

The MSCS measures to help achieve the overall species conservation goals, for the most part, refine or elaborate the Ecosystem Restoration Program, CMARP, or other CALFED Program actions and will be funded and implemented as part of these actions.

The ESA does not illegally discriminate against people or private property rights. In implementing the Program in compliance with the state and federal ESAs, CALFED will work with willing sellers and cooperating landowners.

#### 1.2 Relationship of the MSCS to the Ecosystem Restoration Program

MS 1.2-1

The MSCS has been revised to clarify that the species recovery aspect of the MSCS will be implemented through the Ecosystem Restoration Program, the CMARP, and other CALFED Programs. The Ecosystem Restoration Program has been refined to reflect the MSCS species goals and to incorporate appropriate MSCS species prescriptions.

### 2.2 Species Evaluated by the MSCS

MS 2.2-1

The CALFED ecosystem restoration objective is to improve and increase aquatic and terrestrial habitats, and to improve ecological functions in the Bay-Delta in order to support sustainable populations of diverse and valuable plants and animal species. The MSCS team, consisting of staff from CALFED, USFWS, NMFS, DFG, the U.S. Department of the Interior's solicitors office, and the State Attorney General's office, developed a list of special-status species known to occur or with the potential to occur within the MSCS focus area. The MSCS focus area includes the area within the Ecosystem Restoration Program focus study area (which includes the solution area) and the 12 potential reservoir sites. To be considered a special-status species, a species needed to meet at least one of the 10 criteria listed on pages 2-6 in the June 1999 MSCS.

The DFG, USFWS, and NMFS (wildlife agencies), when assessing CALFED's impact on special-status species, must consider all actions undertaken by CALFED within the project's geographical scope (see pages 1-10 in the June 1999 Draft Programmatic EIS/EIR). Providing each species with a conservation goal (recovery [R], contribute to recovery [r], or maintain [m]) and a prescription as to how the goals will be attained, ensures that the CALFED ecosystem restoration goal mentioned above is met.

MS 2.2-2

The American white pelican was included on the list of species considered for inclusion in the MSCS but not evaluated (Attachment 1). The pelican was not included on the evaluated species list because it failed to meet the two criteria as follows:

- Has no legal protection under federal or California ESAs or other California Fish and Game Code sections, and is not likely to become federally or California listed as threatened or endangered during the term of CALFED implementation; and
- Would not be substantially affected by CALFED actions and is not rare or limited in distribution.

MS 2.2-3

An EIS or an EIR must include a description of the environment in the project or program area as it exists before the project or program commences. The description of the existing conditions provides the base from which the lead agency can assess whether or how a project or program will result in a significant adverse effect on the environment. Historical data on species populations trends, the extent and distribution of habitat, and how species and habitats have benefitted from prior projects is valuable information but is not required.

The "Affected Environment/Existing Conditions" discussion for biological resources was based on the existing conditions in the Program area in 1995, when the supporting technical reports were initially prepared. The technical reports have been updated during development of the June 1999 Draft Programmatic EIS/EIR, but most data dates to 1995. The "Affected Environment/Existing Conditions" discussion in Sections 6.1 and 6.2 in the Programmatic EIS/EIR provides general information on species and habitats by region. The existing conditions generally incorporate any benefits to species and habitats derived from ecosystem enhancement projects prior to 1995. The level of information in the Programmatic EIS/EIR is sufficient for a programmatic-level understanding of the significant effects of the CALFED Program and its alternatives on species and habitats.

The supporting technical reports for fisheries/aquatic resources and vegetation/wildlife provide additional detail about current habitat and species conditions and a historical perspective. The technical reports are referenced in the June 1999 Draft Programmatic EIS/EIR on page 12-1. More detailed information on the 244 species evaluated in the MSCS is contained in the MSCS, Chapter 2, and in the MSCS technical report entitled "Species Accounts for MSCS Evaluated Species." The species accounts contain detailed ecological and status information on the 244 evaluated species. Neither NEPA nor CEQA requires that specific improvements to certain species due to ecosystem investment be documented separately in the discussion of existing conditions.

#### 3.1 Species Goals

MS 3.1-1

See response MS 7.0-4, which explains how the MSCS incorporates recovery actions from all existing recovery plans for the MSCS evaluated species. The USFWS and NMFS have an independent legal obligation to develop recovery plans for federally listed species. For federally listed species that do not yet have recovery plans, the USFWS and NMFS fully intend to utilize the MSCS, including its biological data and conservation measures, in development of such plans. The MSCS will serve as a "blueprint" for recovery of listed species, even if the USFWS and NMFS have not adopted the MSCS as the recovery plan for all ESA-listed species.

### 3.2 Prescriptions for Reaching Species Goals

MS 3.2-1

The prescription for recovery of the Central Valley steelhead (Oncorhynchus mykiss) has been changed in the final MSCS and the Ecosystem Restoration Program Plan, Volume 1. The prescription now reads:

The Central Valley steelhead ESU will be regarded as restored when the ESU meets specific viability criteria to be established in the NMFS recovery plan for Central Valley salmonids. Viability of the Central Valley steelhead ESU will be assessed according to the VSP framework developed by NMFS (NMFS, in review). The framework deals with four population characteristics:

- Abundance: Populations are large enough to resist extinction due to random environmental, demographic and genetic variation.
- Productivity: Populations have enough reproductive capacity to ensure resistance to episodes of poor freshwater or ocean conditions and the ability to rebound rapidly during favorable periods, without the aid of artificial propagation.
- Spatial Distribution: Populations are distributed widely and with sufficient connectivity
  such that catastrophic events do not deplete all populations and stronger populations can
  rescue depleted populations.
- Diversity: Populations have enough genetic and life history diversity to enable adaptation to long-term changes in the environment. Populations achieve sufficient expression of historical life history strategies (migration timing, spawning distribution), are not negatively impacted by outbreeding depression resulting from straying of domesticated hatchery fish, and are not negatively impacted by inbreeding depression due to small population size and inadequate connectivity between populations.

The NMFS recovery planning for Central Valley salmonids will proceed in two phases. The first phase will be conducted by a TRT that will produce numeric recovery criteria for populations and the ESU following the VSP framework, factors for decline, early actions for recovery, and provide plans for monitoring and evaluation. The TRT will review existing salmonid population recovery goals and management programs being implemented by federal and State agencies and will coordinate with agency scientists, CALFED staff and Central Valley science/restoration teams

such as the Interagency Ecological Program work teams during this first phase. TRT products will be peer-reviewed and made available for public comment.

The second phase will be identification of recovery measures and estimates of cost and time required to achieve recovery. The second phase will involve participation by agency and CALFED staff as well as involvement by a broad range of stakeholders, including local and private entities, with the TRT providing technical guidance on biological issues.

This change has been made in Attachment E, Table 1, page 15, in the final MSCS.

MS 3.2-2

Ocean harvest management is undoubtedly an important component in the recovery of Central Valley chinook salmon. Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), regulation of commercial fisheries in the U.S. Exclusive Economic Zone of the western coast of the United States (where much of the commercial salmon harvest occurs) is the responsibility of NMFS and the Pacific Fishery Management Council (PFMC). In ocean waters under the jurisdiction of the State of California (areas from 0 to 3 miles offshore), the Fish and Game Commission manages recreational fisheries (as well as the inland salmon harvest) and the DFG manages commercial fisheries under the authority delegated by the State Legislature (Fish and Game Code Section 7600 et seq.). The PFMC is composed of representatives of NMFS, other federal agencies, state agencies (California, Washington, Oregon, and Idaho), tribes, and individuals with pertinent expertise; the PFMC is not a CALFED agency. The Magnuson-Stevens Act directs the PFMC to work in conjunction with NMFS and other interested and affected parties to develop fishery management plans (FMPs), including those affecting salmonids, for submittal to the Secretary of Commerce for approval. An FMP, in turn, establishes an independent technical process for development of annual harvest guidelines and fishery specifications. This process, mandated by the FMP, does not fall within the ambit of the regulatory framework of the CALFED Program; therefore, ocean harvest affecting salmonids is not within the purview of CALFED. Like all agencies participating in the CALFED process, NMFS will continue to independently implement its regulatory responsibilities that are outside the scope of the CALFED Program. With respect to ocean harvest issues in particular, NMFS will continue to work closely with the PFMC to promote the goals of the CALFED Program regarding anadromous salmonids.

MS 3.2-3

The CALFED agencies may not be able to fully recover salmonids through implementation of the CALFED Program. The complicated life history of salmonids causes them to spend part of their lives in the ocean, outside the CALFED solution area. See response MS 3.2-2, describing the legal framework for regulating ocean harvest of anadromous fish. Nevertheless, water agencies that are implementing CALFED Program actions to assist with recovery of the "R" anadromous fish species will receive some level of assurances.

MS 3.2-4

The measures identified in the MSCS are consistent with CALFED's stated mission and objectives, and with requirements placed on state and federal agencies under the endangered species laws. See response MS 5.1.2-2, describing how an ecosystem approach to conserving species is consistent with the federal and state ESAs and the NCCP Act.

The USFWS and NMFS are required by the ESA to prepare recovery plans for federally listed species. The CALFED Program does not replace the requirement of the USFWS and NMFS to prepare these plans. CALFED

species goals and conservation measures are based on existing recovery plans, when possible. Actions that are necessary to "recover" or "contribute to the recovery of" species not currently listed are included in the MSCS for two reasons: (1) to avoid future listings; and (2) to ensure that if any of the unlisted covered species addressed in the MSCS and programmatic decisions are subsequently listed pursuant to the federal and state ESAs, the programmatic decisions can authorize the take of the species based on the conservation measures already contained therein.

It is the intent of the Program to reduce or avoid impacts on productive agricultural lands through the following strategies:

- Focus habitat restoration efforts on developing new habitat on public lands before converting agricultural land.
- Restore existing degraded habitat as a priority before converting agricultural land to nonagricultural habitat uses.
- Use farmer-initiated and -developed restoration and conservation projects as a means of reaching Program goals.

Some Program goals may be met without taking agricultural lands out of production, such as flooding croplands in winter to provide seasonal wetlands or acquiring easements for agricultural practices that benefit wildlife. For agricultural lands required after considering these strategies, the Program proposes to acquire land only from willing sellers.

# 3.4 Goals for NCCP Habitats and Fish Groups

MS 3.4-1

The USFWS and NMFS expect to have completed a programmatic biological opinion at the time of the Record of Decision (ROD), based on the project description and analysis in the CALFED Programmatic EIS/EIR. Similarly, DFG is expected to make its NCCP determination at the time of the Notice of Determination (NOD) for the Programmatic EIS/EIR. As to the inclusion of actions and strategies that support the habitat needs of wetland species other than the focus fish species, the MSCS incorporated the Ecosystem Restoration Program goals for 18 habitats found within its geographical scope. Of the 18 habitats, 8 habitats—ranging from tidal perennial aquatic to seasonally flooded agricultural lands—serve the habitat needs of waterfowl, shorebirds, amphibians, and mammals. As implementation of the protection and/or restoration of these habitats moves forward in a more project-specific manner, models provided by documents such as the Baylands Ecosystem Habitat Goals (March 1999) and the San Francisco Bay Joint Venture's Restoring the Estuary: An Implementation Strategy for the SFBJV, as well as close coordination with organizations such as the San Francisco Bay Joint Venture, will assist CALFED in ensuring that all the species and habitat goals are realized.

MS 3.4-2

The commentor's assumption that it will require 1.2 million acres of agricultural land to reach the goals for the NCCP habitats in the MSCS is erroneous. Specifically, the 388,000 acres of seasonally flooded agricultural land and upland cropland are the same acres, not additive. It is unclear where the rest of the 1.2 million acres came from, although it is assumed to have been compiled from other habitat goals, such as managed seasonal wetlands. Adding these numbers together and assuming that they reflect newly created habitat is misleading. The managed seasonal wetlands figures, for the most part, account for existing wetlands that will be improved and are not now

in agricultural use. The upland cropland/seasonally flooded agricultural land number (388,000 acres) will affect but will not convert agricultural lands. See also response ERP 0.2-1.

See response MS 3.2-4, which describes the mitigation strategies for minimizing the impacts to agricultural lands that may result from implementation of habitat restoration activities. Because these strategies will be funded through implementation of the Ecosystem Restoration Program and through mitigation for Program impacts, they will not fall on the private landowner. The CALFED Program and its participating agencies have accepted the responsibility of recovering the focus species of the CALFED Program.

MS 3.4-3

The purpose of the MSCS is to provide the biological analysis and data for the Program's compliance with the endangered species laws. Accordingly, the conservation measures contained in the MSCS are intended to improve the health of species and habitats within the MSCS focus area. The MSCS recognizes the habitat values provided by upland croplands and seasonally flooded agricultural lands, and specifies conservation measures that maintain the agricultural values of these lands while also enhancing their value for species.

One of the stated purposes of the CALFED Program is to improve water supply reliability to all users of Bay-Delta water. Given the variability in California's climate, the many sources used for irrigation water, and the wide variances in cost and willingness-to-pay, CALFED cannot guarantee a set amount of water to agriculture in general, or to any other sector. CALFED has proposed programs that will, if fully implemented, result in more reliable water supplies to users. These programs include not only the MSCS, which will strive to avoid future endangered species listings and attendant water diversions, but the Levee System Integrity Program and Storage and Conveyance. It would be infeasible and outside the scope of the Program, however, to state that a certain number of acre-feet of water are guaranteed to agriculture statewide.

The Program intends to reduce or avoid impacts on productive agricultural lands through implementation of the following strategies:

- Focusing habitat restoration efforts on developing new habitat on public lands before converting agricultural land.
- Restoring existing degraded habitat as a priority before converting agricultural land to non-agricultural habitat uses.
- Using farmer-initiated and-developed restoration and conservation projects as a means of reaching Program goals.

Some Program goals may be met without taking agricultural lands out of production, such as flooding croplands in winter to provide seasonal wetlands or acquiring easements for agricultural practices that benefit wildlife. For agricultural lands required after considering these strategies, the Program proposes to acquire land only from willing sellers.

MS 3.4-4

The acreages for all NCCP habitats have been checked and corrected to be consistent with the Programmatic EIS/EIR and the Ecosystem Restoration Program Plan.

#### 4.1.8 Conveyance

MS 4.1.8-1

The action referred to by the commentor is one of the actions proposed to be taken during implementation of the Preferred Program Alternative. Locations and feasibility of levee setbacks will be evaluated in the action-specific implementation plan (ASIP) for that specific project.

### 5.1.2 Determining the Likelihood That CALFED Program Actions Will Affect Evaluated Species

MS 5.1.2-1

Actions in the Water Use Efficiency Program and other parts of the CALFED Program that may result in potential adverse impacts on the giant garter snake will be required to incorporate appropriate mitigation as part of project-specific NEPA/CEQA review. The text in Section 6.2 in the Programmatic EIS/EIR has been revised to indicate that biological impacts from the Water Use Efficiency Program can be mitigated to a less-than-significant level. Further, MSCS conservation measures will be incorporated into such projects through the ASIP process during project-specific compliance with the endangered species laws. Giant garter snakes will also benefit from Ecosystem Restoration Program actions, including measures to enhance, restore, and protect natural and managed seasonal wetlands, nontidal freshwater permanent emergent wetlands, and seasonally flooded agricultural lands.

MS 5.1.2-2

Although the consultation process tends to focus on one or a few listed species, the purpose of the federal ESA is to recover listed species by restoring the ecosystems on which they depend (Section 2 in the federal ESA). The California ESA has a similar purpose. The NCCP Act contains an even more pronounced ecosystem focus in that it promotes enhancement of the condition of both listed and non-listed species in the area for which a project proponent is preparing an NCCP Plan. Accordingly, the mandates of the federal and state ESAs and the NCCP Act complement CALFED's focus on ecosystem restoration. Where individual actions inevitably benefit one species to the detriment of another, it is critical to consider the effects of the whole Program and its overall benefits to individual species. CALFED's goals for species management are to recover, contribute to recovery or, at a minimum, maintain the baseline of individual species affected by the CALFED Program.

#### 5.1.4 Impact Analysis

MS 5.1.4-1

The two GIS databases discussed in the MSCS were used to determine the extent of the NCCP habitats within the MSCS focus area and not for habitat quality or restoration. The use of higher resolution along with the necessary field surveys will take place at the project-specific level, as will the discussion on the type and seral stage of the restored habitat.

#### 5.2 Conservation Measures

MS 5.2-1

CALFED is currently working with a panel of scientists and biologists to ensure that restoration of the key habitats and functions proceeds in the most scientifically correct manner possible. Staff from the CMARP and

the Ecosystem Restoration Program are jointly working on developing "white papers" to identify data needs for major ecological processes, habitats, species, and stressors that are the focus of the Ecosystem Restoration Program. These white papers will provide guidance on the most critical and appropriate restoration actions to take within geographical areas, research to be conducted to address uncertainties, and monitoring to assess baseline conditions and changes to the conditions as a result of restoration actions.

In response to this comment and several others, the text of the Ecosystem Restoration Program has been revised to clarify the consistency between the measures discussed in the Ecosystem Restoration Program and the conservation measures discussed in the MSCS for endangered species purposes. See also responses MS 5.2.2-1; MS 1.0-2; and ERP 0.2-1.

# 5.2.2 Conservation Measures for Evaluated Species

MS 5.2.2-1

The MSCS is a part of the CALFED Program. The conservation measures in the MSCS serve two distinct purposes. One set of measures sets forth what is required to avoid, minimize, or compensate for the impacts of the Program on endangered species and habitats. These conservation measures fall within the parameters of the mitigation strategies set forth in the Programmatic EIS/EIR. A second set of measures sets forth what is required for the Program to meet the species goals. These measures are comprised of existing elements of the CALFED Program, particularly the Ecosystem Restoration Program, but at a higher level of detail to satisfy the requirements of the endangered species laws. Accordingly, the MSCS conservation measures are not additive to the Program actions and mitigation strategies analyzed in the Programmatic EIS/EIR. The MSCS therefore does not create new or additional impacts, either to agricultural resources or any other resources, beyond the impacts disclosed in the Programmatic EIS/EIR. See also response ERP 0.2-1.

MS 5.2.2-2

The MSCS serves as an ESA biological assessment for federal law compliance, and a programmatic NCCP for state law compliance. The Programmatic EIS/EIR describes the broad range of environmental consequences of implementing all elements of the CALFED Program, including the MSCS, and describes appropriate mitigation strategies in each resource area. Socioeconomic effects on agricultural resources are described in Sections 7.2 and 7.3 in the Programmatic EIS/EIR. The specific locations for habitat restoration efforts have not been identified at the programmatic level.

During the implementation phase of the Program, second-tier or site-specific environmental documents will be prepared for individual projects. These documents will identify specific locations for Program actions and the specific conservation measures that will be required to minimize or compensate for the impacts of the actions. Site-specific environmental documents will identify the existing land uses in the project area and will evaluate the socioeconomic effects of implementing the Program action, where appropriate.

The MSCS is a part of the CALFED Program. The MSCS conservation measures are not additive to the Program actions and mitigation strategies analyzed in the Programmatic EIS/EIR but rather serve as more specific guidance for mitigating Program impacts on endangered species. Each conservation measure in the MSCS falls within the general parameters of a Program action or mitigation strategy discussed in the Programmatic EIS/EIR. Accordingly, the MSCS does not create new or additional impacts on agricultural resources beyond the impacts disclosed in the Programmatic EIS/EIR.

The Program strategies, and therefore the MSCS strategies, for addressing potential impacts on agricultural lands can be found in response MS 3.4-2.

#### 6.1.1 Habitat Conservation Plans

MS 6.1.1-1

The text on page 6-1 in the June 1999 MSCS has been modified to acknowledge that the Solano County Water Agency has commenced preparation of a Habitat Conservation Plan.

# 6.1.4 FERC Hydropower Relicensing

MS 6.1.4-1

FERC's relicensing effort on the Mokelumne River may affect CALFED ecosystem restoration efforts on the Mokelumne River but is otherwise beyond the scope of the MSCS and would be more properly addressed with FERC directly. FERC must take into account the health of the aquatic ecosystem on any waterway where they are engaged in the (re)licensing process. As a result, any action by FERC on the Project No. 137 relicensing effort most likely would not be contrary to CALFED objectives.

# 7. ESA, CESA, and NCCP Act Compliance

MS 7.0-1

In their roles as lead agencies under the CALFED Program, the USFWS and NMFS have been engaged in informal consultation with other CALFED agencies since CALFED's inception. During informal discussions, the USFWS, NMFS, and other CALFED agencies have discussed the consultation process at length. CALFED agencies initiated formal consultation with the USFWS and NMFS in spring 2000. At the completion of formal consultation, the USFWS and NMFS have stated that they will issue programmatic biological opinions on the CALFED Program. The USFWS and NMFS have completed numerous programmatic biological opinions, and this mechanism is appropriate here. The CALFED Program and programmatic biological opinions will identify the framework and informational needs for initiating and completing subsequent formal consultations during Phase III of the CALFED Program. The ASIPs contribute to streamlining the process and will be completed as part of Phase III of the CALFED Program.

MS 7.0-2

The MSCS will serve as the framework for the Central Valley Project (CVP) and the State Water Project (SWP) operational changes, resulting from CALFED Program actions, to comply with the endangered species laws. Specific regulatory requirements pertaining to CVP and SWP operational changes from CALFED Program actions will be developed when the CALFED agencies develop more detailed information about specific CVP and SWP operational scenarios during Stage 1. The level of certainty and assurances for CVP and SWP operations will increase as the health of the ecosystem increases.

CALFED has not taken into account the likelihood of third-party lawsuits by those who believe that mitigation is inadequate or that a crucial piece of scientific information was not used during the consultation process.

Ongoing projects that are in compliance with federal and State ESA may legally continue operations. The 1999 delta smelt "crisis" occurred under an existing USFWS biological opinion. Presently, CALFED is developing new operational mechanisms and criteria in an attempt to minimize the likelihood of future conflicts between sensitive fish, including delta smelt, and operations at the Banks and Tracy diversions. One such measure, an Environmental Water Account (EWA), would allow greater flexibility in operations at the Banks and Tracy diversions by authorizing increased pumping during less fisheries-sensitive parts of the year to offset decreased pumping during more sensitive periods.

During consultation, the consulting agencies are required to use the best scientific and commercial data available (50 CFR 402.12). If, after issuance of a biological opinion, new information reveals effects of an action in a manner or to an extent not considered in the biological opinion, reinitiation of consultation is required (50 CFR 402.16). The CALFED Program has been structured in anticipation of new informational developments. CALFED has incorporated the principles of adaptive management throughout its Program to develop new information and modify the CALFED Program accordingly. This adaptive management approach is not jeopardized by the consultation process. The USFWS and NMFS routinely incorporate adaptive management into the consultation process and recommended its inclusion in the CALFED Program. Adaptive management should help to conserve sensitive species and improve the reliability of water supplies.

CALFED can address the potential for third-party lawsuits only by adhering to existing legal requirements and processes.

MS 7.0-4

The MSCS is designed to achieve programmatic compliance for the CALFED Program with the federal and state ESAs and the NCCP Act. The CALFED Program is coordinated with recovery plans for federally and state-listed species in two ways. First, the Ecosystem Restoration Program has incorporated all recovery actions from existing recovery plans for federally and state-listed species. Second, the MSCS includes all recovery actions from existing recovery plans as mandatory conservation measures. The MSCS also bases its species prescriptions on the recovery plans for federally and state-listed species (see Chapter 3 in the June 1999 MSCS).

MS 7.0-5

The ASIPs for Program actions will be subject to public review during the NEPA and/or CEQA processes for individual Program actions.

MS 7.0-6

The MSCS provides an appropriate framework for compliance with the endangered species laws at both a programmatic and project-specific level. The commentor is correct in stating that water users may obtain the best assurances against increased limitations on export pumping by improving the health of the Bay-Delta ecosystem. To that end, the MSCS specifies conservation measures that must be implemented for the Program to achieve the species goals. These measures will be implemented throughout the duration of the CALFED Program, however, and will not necessarily be implemented in full during Stage 1.

CALFED disagrees that the MSCS is insufficient for a programmatic ESA biological assessment. The MSCS provides a level of detail about Program actions and their impacts on species that is commensurate with a programmatic document. Commitments to implement the MSCS, including its conservation measures, will

become part of an agreement that will be executed at the time the CALFED agencies issue the ROD and adopt findings of fact for the CALFED Program (see Section 7.4.4 in the June 1999 MSCS). As described in Section 7.4.6 in the June 1999 MSCS, funding for implementation of CALFED Program actions, including the conservation measures in the MSCS, generally will come from a variety of sources. Specific funding for implementing the conservation measures in the MSCS will be developed through the ASIP process for individual Program actions or groups of actions.

MS 7.0-7

The change has been made.

# 7.1 Programmatic ESA, CESA, and NCCP Act Compliance for the CALFED Program

MS 7.1-2

The agencies that administer the state and federal ESAs, including DFG, USFWS, and NMFS, are contributing members of CALFED and share principal responsibility for approving the project. Their role, in part, has been to conduct informal consultation with CALFED to develop a Preferred Program Alternative in the Programmatic EIS/EIR that achieves their agencies' requirements, provides appropriate regulatory certainty, and is fully enforceable under existing environmental law. Coverage for species that are presently listed under the federal and state ESAs, and for those with the potential to be listed during the term of the Program, has been provided in the MSCS through the development of conservation goals and the conservation measures necessary to meet those goals. Should a species be listed that is fully covered by the MSCS during the term of the CALFED Program, there should be no need for the agencies to require additional conservation measures, unless new scientific information available at the time of listing indicates that additional measures are necessary.

CALFED does not have the authority to write recovery plans, as defined in the federal ESA. NMFS and the USFWS have statutory and institutional responsibilities related to the development and adoption of recovery plans for species listed under the federal ESA. Development of these plans is guided by federal regulations. Ecosystem Restoration Program development to date has not fully met all necessary steps, including the opportunity for public comment on the document as a recovery plan (although it has received extensive scientific and public review as an ecosystem restoration plan for the Delta), the use of best available independent scientific expertise on the listed species, and disqualification of parties to plan development who have a conflict of interest. Implementation of recovery plans is not mandatory; these plans are intended to assist federal agencies in using their authorities to further the purposes of the federal ESA. The federal ESA does direct federal agencies, in consultation with and with the assistance of the USFWS and NMFS, to further the purposes of the ESA by carrying out conservation programs for listed species.

CALFED developed the MSCS, in consultation with and assisted by the USFWS and NMFS, with the explicit goal of achieving recovery for "big R" species. Although the MSCS does not constitute a recovery plan as defined by the federal ESA, it does constitute a plan to achieve ("R") or contribute to the recovery of ("r") those species affected by the CALFED Program. The Ecosystem Restoration Program has incorporated all recovery actions from existing recovery plans for federally and state-listed species, and the MSCS includes all recovery actions from existing recovery plans as mandatory conservation measures. The MSCS also bases its species prescriptions on the recovery plans for federally and state-listed species.

#### 7.2.1 Streamlined Compliance Process

MS 7.2.1-1

The Ecosystem Restoration Program identifies programmatic actions at a greater level of detail than other common programs. The level of detail provided in programmatic action descriptions also varies among the other common program elements. Consequently, the level of analysis varies among common programs according to the level of detail provided in programmatic action descriptions. For some Program elements, specific programmatic actions have not been identified; but the likely environmental effects on MSCS-evaluated species and NCCP habitats of constructing storage facilities and affecting water transfers, for example, can be and are reasonably addressed at a programmatic level in the MSCS.

Initially, streamlining benefits will accrue to those Program actions that were fairly well defined at a programmatic level. For these actions, the programmatic MSCS included substantial biological data and analysis that will form the basis for ASIPs. The wildlife agencies will use these ASIPs to determine project-specific compliance with the ESA and NCCP Act. For other Program actions that were defined much more generally at a programmatic level, additional biological data and analysis will be required for ASIPs, and project-specific regulatory compliance will be less streamlined. Nevertheless, all CALFED Program actions will benefit from regulatory streamlining for compliance with the endangered species laws.

### 7.2.2 Action-Specific Implementation Plans

MS 7.2.2-1

An operating agreement governing changes resulting from CALFED actions will comply with the federal ESA and the NCCP Act in the same manner as other Program actions. A proposed operating agreement will be the subject of an ASIP for endangered species compliance. The ASIP for an operating agreement will include, among other things, a detailed project description; a list of species in the action area, drawn from the MSCS; an analysis of the operating agreement's impacts on the species and any designated critical habitat; conservation measures in the MSCS to minimize and mitigate impacts and the funding to accomplish them; conservation measures in the MSCS to achieve the species goals and the funding to accomplish them; and measures to provide assurances to cooperating landowners (see Section 7.2.2 in the June 1999 MSCS). The wildlife agencies will use the ASIP as the basis for determining compliance with federal and state ESAs and the NCCP Act, authorizing incidental take of covered species, and providing any assurances.

MS 7.2.2-2

The MSCS provides a programmatic level of discussion of CALFED Program actions. Because many Program actions are defined only generally at the programmatic level, additional biological data and analysis may be required beyond what is contained in the MSCS. The need for specific additional information, such as site-specific population surveys, will depend on the type and location of the Program action. Due to the sheer number of actions in the CALFED Program, the MSCS does not attempt to state which programmatic actions will or will not require additional data and analysis.

MS 7.2.2-3

The MSCS is intended to provide a broad evaluation of how the entire CALFED Program will affect species and habitats and an overall strategy for ensuring that the Program meets the species goals. The array of biological information and analysis in the MSCS will assist entities implementing Program actions by forming the basis for

the ASIPs. In this sense, agencies and entities implementing CALFED Program actions will not need to "start from scratch" with endangered species compliance. Nevertheless, as the MSCS acknowledges, additional information will be required in many ASIPs to allow the wildlife agencies to ascertain how a Program action affects species and habitats (see page 7-2 in the June 1999 MSCS). Some Program actions will require a lesser degree of additional information and analysis because they are relatively well defined at the programmatic level. For example, some actions in the Ecosystem Restoration Program may be sufficiently detailed so that the information and analysis in the MSCS constitutes the majority of what will be required in an ASIP (see Chapter 7 in the June 1999 MSCS).

MS 7.2.2-4

The MSCS does not contain an adequate level of detail to provide compliance with federal and state ESAs or the NCCPA for individual Program actions, particularly considering that the location and scope of most individual Program actions remains only partially defined at the programmatic level. Agencies and other entities implementing Program actions will develop the ASIP as the project-level blueprint for project-level compliance with the endangered species laws. The likelihood that the wildlife agencies will impose conservation measures on project proponents beyond those delineated in the MSCS has been reduced by the comprehensive and programmatic nature of the MSCS. In addition, the MSCS creates a preference for measures that do not require additional commitments of either land or water in the event that additional conservation measures are required to comply with federal and state ESAs or the NCCPA. Thus, while the wildlife agencies cannot eliminate the possibility that additional biologically necessary measures may be required through the ASIP process, the MSCS protects the water user benefits that may accrue from implementation of Stage 1 actions to the maximum extent allowed by the endangered species laws.

MS 7.2.2-5

CALFED has acknowledged the need for an increase in staffing for the variety of permits that may be necessary to implement the Program. A proposal is in development for a streamlined permit review process that would include an inter-agency task force.

MS 7.2.2-6

The coordination of environmental review and permitting for CALFED actions is in development. The public will be informed when the process is complete.

# 7.3 Covered Species

MS 7.3-1

Under the MSCS, each covered species must be adequately conserved. Any of the 244 evaluated species that are not adequately conserved by the CALFED Program will not be covered species for purposes of compliance with the federal and state ESAs and the NCCPA. Therefore, the list of covered species may not include all of the evaluated species. This does not mean that the "adequately conserved" standard in the MSCS is inconsistent with the species goals in the MSCS. The goals of "recovery" or "contribute to recovery" are clearly consistent with the "adequately conserved" standard for any species because the Program includes measures that will protect and perpetuate these species. The goal of "maintain" may be consistent with an "adequately conserved" standard, depending on the condition of the species and the extent to which the species may incidentally benefit from Program actions. For example, preservation of existing populations of certain "m" species may allow the species

to exist in perpetuity. The species would be "adequately conserved" under the MSCS and therefore could be included in the covered species list.

MS 7.3-2

As the majority of the commentor's letter addresses impacts on anadromous fish species, specifically salmon and steelhead, it is assumed that the concern is with the potential listing of those species. CALFED has addressed the need to recover all the anadromous fish species found within the focus area of the Program regardless of their legal status (i.e., federally or state-listed, or not listed).

The MSCS has provided for the potential of non-listed at-risk native fish species becoming listed during the term of the Program by including them as covered species. All covered species have been given a conservation goal of recovery, contribute to recovery, or maintain—with corresponding conservation measures ensuring that those goals can be met.

# 7.3.1 Incidental Take Authorization for Covered Species

MS 7.3.1-1

As stated in Chapter 7 in the June 1999 MSCS, neither the programmatic biological opinions nor the programmatic NCCPA determination will authorize take of the species covered in the MSCS. The wildlife agencies may authorize the incidental take of covered species based on the programmatic MSCS and an ASIP. ASIPs will be developed for individual Program actions or groups of actions when information is available in sufficient detail to allow the wildlife agencies to fully evaluate the impacts on covered species and habitats. This approach includes system operations resulting from CALFED Program actions.

MS 7.3.1-2

The MSCS serves two main purposes. First, the MSCS will ensure that CALFED Program actions comply with the endangered species laws, avoid jeopardy, and adequately conserve the MSCS evaluated species. The MSCS prescribes a process for individual project proponents to follow in order to comply with endangered species laws during project implementation. The compliance process will ensure that project proponents implement measures to avoid, minimize, and compensate for adverse effects to NCCP communities and evaluated species that are caused by individual Program actions. Second, the MSCS will ensure that implementation of the Program includes implementation of all measures necessary to meet the goals for the species evaluated in the MSCS: recovery, contribute to recovery, or maintain (pages 3-1 and 3-2 in the June 1999 MSCS). Implementation of many actions contained in the Ecosystem Restoration Program is a fundamental step toward ensuring recovery of the ecosystem, including listed and unlisted species.

MS 7.3.1-3

Contrary to the assertion in the comment, Fish and Game Code Section 2835 provides DFG with authority to permit the incidental take of species addressed in an NCCP, independent and apart from DFG's authority to issue incidental take permits under the state ESA. If Section 2835 were interpreted to mean only that DFG may or may not be able to permit the take of species identified in an NCCP, depending on whether it is authorized to do so elsewhere in the Fish and Game Code, Section 2835 would not in any way expand, limit, or clarify DFG's authority. Section 2835 establishes in DFG the authority to permit the take of species, including an endangered species or a threatened species, if the species is conserved through an NCCP.

The case cited in the comment is a Superior Court decision, not an opinion of the Court of Appeal, and does not provide binding authority on this issue. Nor does Fish and Game Code Section 2825(c) support the interpretation advanced in the comment. Section 2825(c) requires DFG to implement an NCCP through the California ESA "if appropriate." This simply means that NCCPs may be used as the basis for issuing incidental take permits. It does not mean that state ESA incidental take permits are the only means by which take may be authorized under an NCCP.

### 7.3.3 Modifications to Covered Species List

MS 7.3.3-1

The MSCS does not propose to limit the wildlife agencies from requiring additional biologically necessary measures when a species is added to the covered species list. If it is necessary to increase measures in order to meet the conservation standard for a species added to the covered species list, the wildlife agencies will require the additional measures. The wildlife agencies have contributed to the content of the MSCS, however, and have provided input on the conservation measures for all 244 evaluated species. The MSCS therefore reduces the likelihood that additional measures will be necessary to cover an unlisted evaluated species if it becomes listed as threatened or endangered. Among biologically adequate measures, it is appropriate for the wildlife agencies to prefer measures that are already developed and included in the Program and that do not require additional obligations of land or water (see Chapter 7 in the June 1999 MSCS).

### 7.4 Implementation

MS 7.4-1

The CALFED agencies will enter into an agreement for the implementation of the programmatic MSCS. The agreement will include a commitment that the agencies will implement the MSCS, including those conservation measures designed to ensure that the Program meets the species goals (see Chapter 7 in the June 1999 MSCS). Thus, the agreement will ensure that those portions of the CALFED Program that are necessary to meet the species goals, including certain parts of the Ecosystem Restoration Program, will be implemented. If certain key Program actions (such as Ecosystem Restoration Program actions) are not implemented as planned, incidental take authorization issued in reliance on the actions may be modified or revoked.

#### 7.4.1 Entities That Will Implement CALFED Program Actions and the MSCS

MS 7.4.1-1

The MSCS discloses that Program actions may be implemented by federal, state, and local agencies, and private organizations and individuals, which is sufficient for programmatic analysis. The specific entities implementing individual Program actions will be identified in ASIPs; their potential for success can be evaluated at that time.

#### 7.4.3 Linking Program Actions for Implementation and the Impact of Linkage on Take Authorization

MS 7.4.3-1

The wildlife agencies will analyze the individual effects of each Program action through the ASIP process, which will tier off the information and analysis in the MSCS. In characterizing the impacts of individual Program actions on species and habitats, however, the wildlife agencies will look at the collective adverse and beneficial

effects of those actions proceeding together. Characterizing the collective adverse and beneficial effects of actions will not nullify recovery objectives in the Ecosystem Restoration Program and the MSCS because each Program action must avoid, minimize, or compensate for its adverse effects on biological resources.

#### 7.4.5 Assurances

MS 7.4.5-1

The wildlife agencies will provide assurances under the federal and state ESAs and the NCCPA to agencies and other entities that will implement Program actions. The scope and duration of the assurances will depend on the type of action being implemented and the condition of the species at issue. The general types of assurances are described in Section 7.4.5 in the June 1999 MSCS.

The wildlife agencies will provide assurances for changes in water operations resulting from CALFED actions that are commensurate with the level of protection that any proposed operations scenarios provide for the listed fish species. The wildlife agencies' programmatic decisions will address short-term assurances for operational changes that will be proposed for the first few years of the Program. Longer term assurances will be developed as the CALFED agencies make decisions about the Water Management Strategy and how an EWA may be handled.

The Northern California Water Association (NCWA) proposal on MSCS assurances (June 8, 1999) was specifically considered in development of the programmatic assurances described in the MSCS. Many suggestions in the NCWA proposal were incorporated. Other suggestions were not incorporated because they were inappropriate at a programmatic level; however, these suggestions may be included in ASIPs, depending on the type of Program action involved.

MS 7.4.5-2

The wildlife agencies are participants in the CALFED Program and will share in the responsibility for implementing the Program after completion of the Programmatic EIS/EIR process. The wildlife agencies have consulted with CALFED Program staff and have contributed to the development of a Preferred Program Alternative that will meet the requirements under the endangered species laws and provide appropriate regulatory certainty. The MSCS provides the framework for the various elements of the Preferred Program Alternative to comply with the endangered species laws. At the same time, the MSCS provides the framework for the CALFED Program to meet its species conservation goals and to provide assurances for implementation of the entire Program. See response MS 7.4.5-1, describing assurances for water users and cooperating landowners during implementation of the various elements of the CALFED Program.

MS 7.4.5-3

The wildlife agencies will provide assurances under the federal and state ESAs and the NCCPA to agencies and other entities that will implement Program actions. The scope and duration of the assurances will depend on the type of action being implemented and the condition of the species at issue. See response MS 7.4.5-4, describing assurances for cooperating landowners. See response MS 5.2.2-1, describing how the actions in the MSCS are not additive to CALFED Program actions and mitigation strategies in the MSCS. The safety impacts of implementing CALFED Program actions are described in Section 7.12 in the Programmatic EIS/EIR.

The wildlife agencies will provide appropriate assurances regarding each CALFED Program action directly to the CALFED agency or other entity carrying out the action. The assurances will be based on the ASIP developed for the Program action in the MSCS streamlined permitting process. Assurances will limit new or different conservation measures that would require additional commitments of land or water, or additional restrictions on the use of land, water, or other natural resources beyond what is required in the ASIP for covered species. The specific scope and duration of the wildlife agencies' assurances will vary, depending on the scope and duration of each Program action's impacts on covered species and whether the impacts will recur or continue over an extended time.

Cooperating landowner programs will include, where appropriate:

- Protections for farmers and ranchers who neighbor land preserved by CALFED agencies for wildlife conservation purposes under the CALFED Program.
- Protections for landowners or local public entities who maintain levees on which wildlife habitat
   will be created or enhanced under the CALFED Program.
- Protections for landowners or local public entities who use or divert water from streams or rivers newly opened to anadromous fish under the CALFED Program.
- Protections for landowners or local public entities who operate and maintain water diversions in which fish screens will be installed under the CALFED Program.

The CALFED Program is developing a coordinated environmental review and permitting process for Program actions. The wildlife agencies are currently developing methods to streamline their own agency review of Program actions for different permit requirements.

MS 7.4.5-5

The MSCS does not circumscribe federal and state agencies' general obligations under the respective ESAs to use their authority to conserve species. The intent of the MSCS is to explain how agencies and other entities implementing CALFED Program actions can receive assurances and that they will not be subject to increasing or shifting obligations to provide mitigation for impacts caused by specific project actions.

MS 7.4.5-6

The wildlife agencies will not provide assurances that will compromise their ability to respond to changed circumstances and declines in species health. The programmatic and comprehensive nature of the MSCS helps to ensure, however, that the necessity for additional measures will be reduced.

MS 7.4.5-7

The justification for providing regulatory assurances to federal and state agencies is that such assurances allow for improved project planning and budgeting. Local public agencies and private entities that depend on the actions of federal and state agencies will benefit from these improvements. Assurances will also facilitate progress on all parts of the CALFED Program by assisting in enabling different Program elements to move forward together.

The CALFED agencies and other implementing entities can authorize limited incidental take by cooperating landowners "as necessary or appropriate to protect compatible existing uses of land and water that could be affected by the Program action or associated conservation measures" (Chapter 6 in the MSCS). Cooperating landowner assurances will extend only to those activities that are compatible with the MSCS and the CALFED Program. As stated in the MSCS, compatible activities are limited to those that will not degrade the existing environmental conditions for covered species and will not prevent the CALFED Program from preserving or improving such conditions (Chapter 7 in the June 1999 MSCS). Accordingly, no cooperating landowner assurances will be offered that will undermine the benefits of the Ecosystem Restoration Program or will reduce the existing health of a species. In addition, cooperating landowner assurances are intended to apply primarily to local public agencies, which are not otherwise obligated to contribute to the recovery of listed species.

For example, a CALFED agency may fund, build, and install a fish screen on a publicly or privately owned water diversion and pay for its maintenance. To obtain cooperating landowner assurances, the owner of the water diversion may need to agree to operate the diversion and fish screen in a manner prescribed by the CALFED agency as being consistent with the Program. The cooperating landowner assurances would potentially allow for the operation of the water diversion and fish screen in a manner that will enhance the conditions for fish species, not maintain the status quo.

MS 7.4.5-9

The comment incorrectly states that the sole limiting factor on cooperating landowner assurances is that they be provided only to uses that do not degrade existing conditions for covered species. The MSCS also limits cooperating landowner assurances to those uses that do not prevent the CALFED Program from preserving or improving conditions for species (see page 7-22 in the June 1999 MSCS. Where appropriate, the wildlife agencies can require that measures necessary to protect cooperating landowners include measures that will further achievement of ESA and MSCS species goals.

MS 7.4.5-10

The wildlife agencies will offer "safe-harbor" type assurances to cooperating individuals and entities. The intent of these assurances is to preserve compatible land uses within the MSCS focus area, even as the number of threatened and endangered species increases. The June 1999 MSCS describes the potential scope of this type of assurance in Section 7.4.5. Notably, the term "safe harbor" refers to a specific regulatory program under the federal ESA, Section 10(a)(1)(a). The wildlife agencies will be offering safe-harbor type assurances, although the assurances will not necessarily fall within federal ESA Section 10(a)(1)(a).

MS 7.4.5-11

The wildlife agencies cannot make determinations regarding assurances or compliance with the federal or state ESAs or the NCCPA for individual CALFED Program actions without sufficiently detailed biological information and analyses. Therefore, specific assurances regarding individual CALFED Program actions or groups of actions will not be provided until an ASIP has been prepared for such actions or group of actions. ASIPs will also serve as project-level biological assessments and will provide the basis for project-level fact findings. In short, assurances, biological assessments, and fact findings for CALFED Program actions will be created or established only when sufficient information and analyses are available to support them.

For the same reason that it is necessary and appropriate for CALFED to address governance and financing at a programmatic level, however, it is necessary and appropriate to address assurances and compliance with federal and state ESAs and the NCCPA at a programmatic level. For this purpose, it is not necessary to know the precise nature and extent of potential development facilities or other specific CALFED Program actions, provided that the MSCS provides an appropriate framework for addressing the impacts of such actions once their nature and extent are better defined. The wildlife agencies can determine generally, or programmatically, whether the CALFED Program provides an appropriate framework for compliance or assurances based on more general, programmatic biological information and analyses. Consequently, the MSCS meets the requirements of federal ESA regulations 50 CFR \$402.12 for a program action.

The MSCS has been revised to clarify funding responsibilities. Funding for implementation of measures required to mitigate the adverse affects of a CALFED Program action or group of actions will be provided as part of the action or group of actions. For example, measures to mitigate the impacts of a development facility will be funded largely, if not exclusively, as part of the development facility action. Measures that are not directly linked to the adverse affects of CALFED actions will generally be funded as part of the Ecosystem Restoration Program, the CMARP, or the Water Management Strategy. In this sense, the discussion of Ecosystem Restoration Program financing issues pertain directly to the MSCS.

MS 7.4.5-12

The Ecosystem Restoration Program and the MSCS include an adaptive management strategy designed to incorporate new information, and to respond to unforeseen successes and failures in their implementation. For further discussion of assurances, please see response MS 7.4.5-11.

MS 7.4.5-13

As stated in Chapter 7 in the June 1999 MSCS, neither the programmatic biological opinions nor the programmatic NCCPAG1

determination will authorize take of the species covered in the MSCS. The wildlife agencies may authorize the incidental take of covered species based on the programmatic MSCS and an ASIP. ASIPs will be developed for individual Program actions or groups of actions when information is available in sufficient detail to allow the wildlife agencies to fully evaluate the impacts on covered species and habitats. This approach includes any changes to existing system operations resulting from CALFED actions.

The wildlife agencies will provide assurances for operational changes that are commensurate with the level of protection that any proposed operations scenarios provide for the listed fish species. The wildlife agencies' programmatic decisions will address short-term assurances for operational changes that will be proposed for the first few years of the Program. Longer term assurances will be developed as the CALFED agencies make decisions about the Water Management Strategy and how an EWA may be handled.

#### 7.4.6 Funding

MS 7.4.6-1

The MSCS is a programmatic compliance document and provides a general description of financing that will be used to implement conservation measures and monitor compliance. Financing will occur in two ways. The MSCS conservation measures that will avoid, minimize, or compensate for impacts of implementing Program

actions will be financed by project proponents and addressed through the ASIPs. (See page 7-23 in the June 1999 MSCS.) Funding must be identified in ASIPs before the wildlife agencies will provide incidental take authorization. The MSCS conservation measures to ensure that the Program meets its species goals may be financed through: (1) ecosystem restoration funding designated in California Proposition 204 and in the Federal Bay-Delta Act, (2) other existing public funding sources, (3) a broad-based user fee, or (4) a combination of the foregoing sources. (See Chapter 7 in the MSCS.)

### 8. Monitoring

MS 8.0-1

The CMARP is the integrated monitoring program that will be used to monitor implementation of MSCS and Ecosystem Restoration Program measures. In addition, the MSCS and Ecosystem Restoration Program will each be implemented according to an adaptive management program that will be informed by the results of the monitoring and research conducted by or through the CMARP. The MSCS has been revised to clarify that conservation measures that are not linked to the direct impacts of CALFED Program actions will be implemented as part of the Ecosystem Restoration Program, the CMARP, or other appropriate CALFED programs. The MSCS, Ecosystem Restoration Program, and the CMARP provide an integrated adaptive management program for such actions. Measures specifically intended to mitigate the impacts of individual CALFED Program actions, and monitoring of the implementation and effectiveness of such measures, will ordinarily be carried out by the entity implementing such actions. However, CALFED anticipates that action-specific monitoring will be conducted in coordination with the CMARP.

MS 8.0-2

The entity implementing the CMARP will be the authority that oversees and coordinates the monitoring of implementation and the success of CALFED's conservation measures, including ecosystem restoration actions.

# 8.1 Purpose of Monitoring

MS 8.1-1

The text has been modified to read "assesses the status of species."

#### 11. Attachments

MS 11.0-1

Education and public outreach programs are important elements of CALFED's Ecosystem Restoration Coordination Program. Monitoring programs for compliance with specific conservation measures such as this one will be part of the ASIPs developed at the project-specific level and will include discussion for the necessary funding.

MS 11.0-2

The change has been made in the MSCS and in the Ecosystem Restoration Program Plan.

MS 11.0-3

Through CALFED's monitoring and adaptive management programs, we will continue to evaluate the applicability of implementing certain management actions such as fine sediment control.

MS 11.0-4

The applicability of implementing actions such as this one will continue to be evaluated through monitoring and adaptive management.

MS 11.0-5

Ecosystem-based educational and public outreach programs are important elements of the Ecosystem Restoration Coordination Program.

MS 11.0-6

The text has been corrected.